

## ABSTRACT OF THE DISCLOSURE

In a problem partitioning method for problem solving in a computer system, a definition of a system to be controlled, a hierarchical control structure definition, problem definitions for a plurality of control nodes in the hierarchical control structure, and a structure evaluation function are used in partitioning the system problem. The partitioning method defines an instantiation of the hierarchical control structure by decomposing the system into a plurality of hierarchical control structure instances, with each control structure instance having a plurality of control levels. The performance of each of the hierarchical control structure instances is evaluated with the structure evaluation function and an optimal hierarchical control structure instance is selected.